

## INTRODUCTION

Since the success of antiretroviral therapy in the 80s, people living with HIV (PLHIV) can now expect to have a life expectancy near or equal to that of individuals living without HIV.<sup>1</sup> However, with an ageing population comes other comorbidities that would also be expected in the HIV-negative population. Many studies suggest that PLHIV have an increased risk of cardiovascular disease compared to those without HIV.<sup>2</sup> This project has the possibility of demonstrating that PLHIV in the CUH have an increased risk of cardiovascular disease.

## METHODS

The files of HIV-positive patients aged 40+ (n=100) were collected in the Department of Infectious Diseases, CUH. Years lived with HIV and years exposed to antiretrovirals, compared to cardiovascular events were analysed using the Independent-Samples t-test. Sociodemographic characteristics by cardiovascular events were analysed using the Chi-Squared Test. When assumptions were violated, the likelihood ratio was used instead, with  $p < 0.05$  being considered significant.

## PREVALENCE OF HYPERTENSION WITH AGE

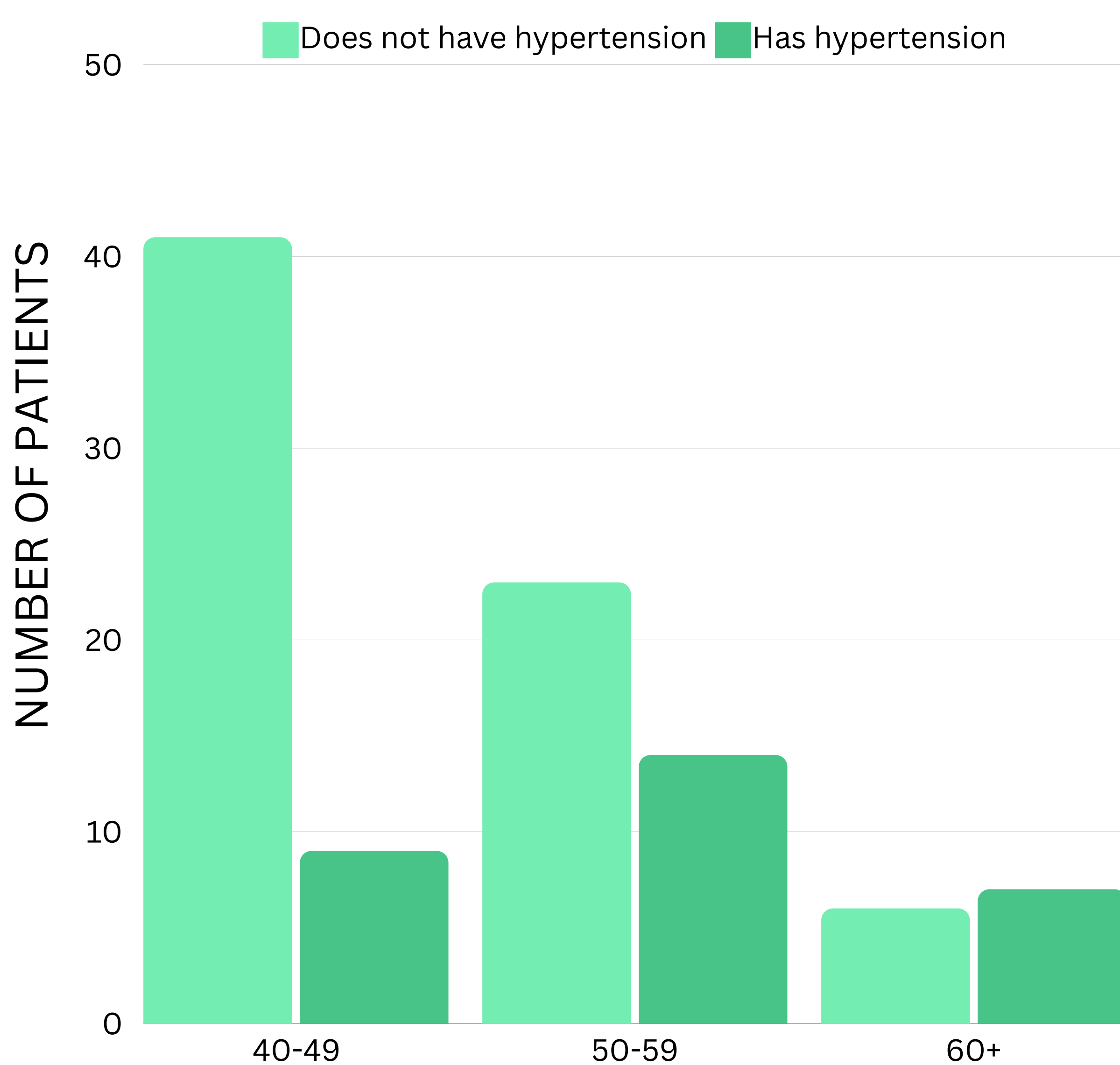


Figure 1 Prevalence of Hypertension with Age

## AIM

To assess whether cardiovascular risk is increased or decreased by the patient’s sociodemographic characteristics and to examine the relationship between years lived with HIV or years exposed to antiretroviral therapy and cardiovascular disease

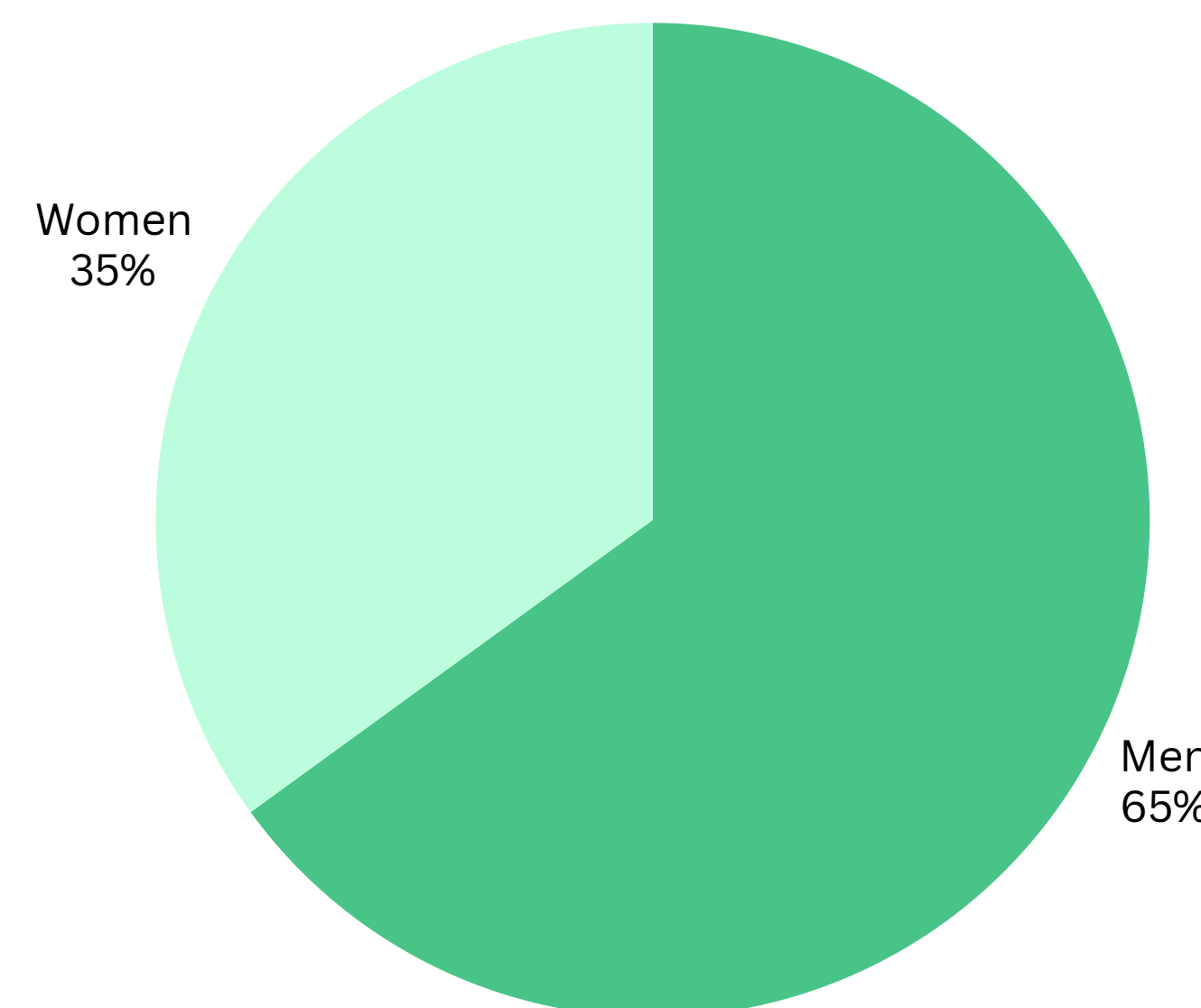
## RESULTS

Only 6% of patients had a cardiovascular event, which included a TIA, myocardial infarction and stroke. 30% had hypertension, 41% had hypercholesterolaemia, and 54% had at least one or more of these variables.

There was significance between age group and hypertension ( $p=0.009$ ). No statistically significant association was found between years lived with HIV and hypertension ( $p=0.677$ ), hypercholesterolaemia ( $p=0.386$ ), cardiovascular events ( $p=0.855$ ) or combined ( $p=0.48$ ).

No statistically significant association was found between years of exposure to antiretroviral and hypertension ( $p=0.715$ ), hypercholesterolaemia ( $p=0.214$ ), cardiovascular events ( $p=0.573$ ) or combined ( $p=0.653$ ).

## SEX



## COUNTRY OF ORIGIN

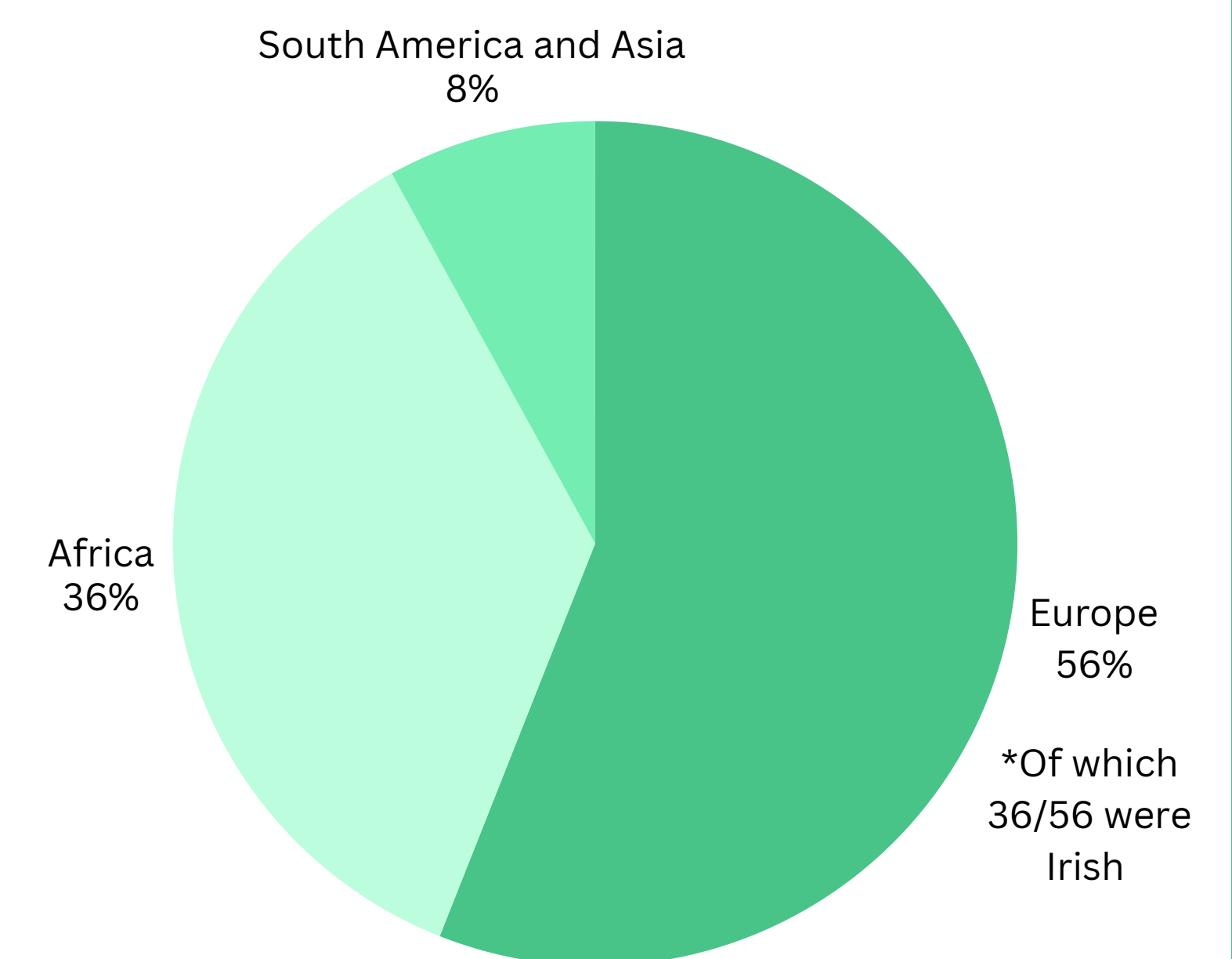


Figure 2 Prevalence of Sex and Country of Origin

## CONCLUSION

In conclusion, this study gives a valuable insight into the population characteristics of this sample. It suggests a significance between age and hypertension. However, further evidence is needed to clarify if there is an association between years lived with HIV and cardiovascular disease as well as years exposed to ART and cardiovascular disease.

In addition, further studies should focus on the prevalence and association between metabolic syndrome and HIV. Cardiovascular disease is common in PLHIV and it is the duty of the healthcare professional to adequately screen, promptly identify and efficiently treat those who are at risk.

## REFERENCES

1. A.J. Rodger, R. Lodwick, M. Schechter, S. Deeks, J. Amin, R. Gilson, et al. Mortality in well controlled HIV in the continuous antiretroviral therapy arms of the SMART and ESPRIT trials compared with the general population AIDS, 27 (2013), pp. 973-979
2. Touloumi G, Kalpourtzi N, Papastamopoulos V, Papanizos V, Adamis G, Antoniadou A et al. Cardiovascular risk factors in HIV infected individuals: Comparison with general adult control population in Greece. PLOS ONE. 2020;15(3):e0230730.